IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (New): A method of electromagnetic stirring in a secondary cooling zone of a plant for continuous casting of metal products of elongate cross section, a mold of which is provided with a submerged casting nozzle having lateral discharge outlets directed towards narrow faces of the mold, and utilizing travelling magnetic fields generated by multiphase inductors placed near the cast metal, the method comprising:

for promoting liquid metal exchange within the liquid pool between a secondary cooling zone and the mold, forcibly establishing a longitudinal metal flow in the secondary cooling zone, the metal flow being localized in a middle region of the cast product as two opposing collinear streams, and providing circulation of the liquid metal as a four-leaf clover configuration design having two upper lobes and two lower lobes, the upper lobes extending into the mold right up to a level of jets coming out from the discharge outlets of the submerged casting nozzle.

Claim 12 (New): A stirring method according to claim 11, wherein the longitudinal opposing collinear streams in the middle region of the cast product, which move away from each other, are created such that the two upper lobes that extend into the mold right up to the level of the jets coming out from the discharge outlets of the casting nozzle merge concurrently with the jets to reinforce the jets.

Claim 13 (New): A stirring method according to claim 11, wherein the longitudinal opposing collinear streams in the middle region of the cast product, which converge on each other, are created such that the two upper lobes that extend into the mold up to the level of the jets emanating from the discharge outlets of the casting nozzle are superposed countercurrently on the jets to slow the jets down.

Claim 14 (New): A stirring method according to claim 11, wherein the location of the longitudinal flow in the secondary is shifted laterally towards one or other of the small sides of cast product.

Claim 15 (New): A stirring method according to claim 11, wherein the longitudinal metal flow is created as the two opposing collinear streams by collinear moving magnetic fields that travel longitudinally in the central region, either coming closer together, or further apart.

Claim 16 (New): A stirring method according to claim 12, wherein the longitudinal metal flow is created as the two opposing collinear streams by collinear moving magnetic fields that travel transversely over the width of the cast product, either coming closer together from an edge towards the center of the cast product, or moving further apart from the center towards the edge of the cast product.

Claim 17 (New): A stirring method according to claim 11, wherein the travelling magnetic fields are generated by multiphase linear inductors placed facing large faces of the cast product.

Claim 18 (New): A stirring method according to claim 17, wherein the inductors are supplied with electric currents of different intensities.

Claim 19 (New): A stirring method according to claim 11, wherein other travelling magnetic fields are also used that act directly in the mold on the jets of metal discharging from the outlets of the nozzle.

Claim 20 (New): A flat metal product obtained from a continuous casting plant, the secondary cooling zone of which being the location of an electromagnetic stirring operation according to that defined in claim 11.